No.



9900409

THE UNIVERD STRAILES OF ANTERIOA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Syngenta Seeds, Inc.

THE TENS. THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, SECONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN SUCCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY CITION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

ALFALFA

'EverGreen'

In Testimon Mercer, I have hereunto set my hand and caused the seal of the Plant Bariety Protection Office to be affixed at the City of Washington, D.C. this second day of April, in the ear two thousand two.

Allost.

Dam Juhil-

Commissioner Plant Variety Protection Office Agricultural Marketing Service Secretary of A

REPRODUCE LOCALLY. Include form number and date on a	all reproductions.		FORM APPROVED - OMB NO. 0581-00		
AGRICULTURAL MARKETING SERVICE SCIENCE DIVISION - PLANT VARIETY PROTECTION O	The following statements are made in accordance with the Privacy Act 1974 (5 U.S.C. 552a).				
APPLICATION FOR PLANT VARIETY PROTECTIO	APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) 1. NAME OF APPLICANT(S) les it is to appear on the Certificate)				
Forage Genetics, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME		
	and the second s	FG 3A30	EverGreen		
4.40000000		Marie Walley			
4. ADDRESS (Street and No., or R.F.D. No., City; State, and ZIP Code, and Cou	κιτγή	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY		
N5292 S. Gills Coulee Road West Salem, WI 54669 U.S.A.	ting see	(608)786-2121	9900409		
	1871 (N.)	6. FAX finclude area code) (608)786-2193	DATE		
7. GENUS AND SPECIES NAME	8. FAMILY NAME (Boten	<u> </u>	N C		
Medicago sativa L.	Leguminos		FUNCAND EXAMINATION FEE:		
9. CROP KIND NAME (Common name)			E DATE		
Alfalfa 10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZA COLDED TO THE TO DE	ATION (composition personal		B CERTIFICATION FEE		
	,	p, essociation, etc.) (Common name)	1 1 2 0 1 L		
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Minnesota		12. DATE OF INCORPORATION	E DATE		
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SER Sharie Fitzpatrick	.*	March 1991	0/20/21		
Sharie Fitzpatrick Forage Genetics N5292 S. Gills Coulee Read West Salem, WI 54669 USA	to a service of the s	en e	14. TELEPHONE Anclude area code; (608)786-2121 16. FAX Anclude area code;		
6. CHECK APPROPRIATE BOY FOR FLOW	<u> </u>		(608)786-2193		
6. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow)。 a. 区 Exhibit A. Origin and Breeding History of the Veriety	nstructions on reverse).				
b. X Exhibit B. Statement of Distinctness	•	٠.			
c. Exhibit C. Objective Description of the Variety			•		
d. Exhibit D. Additional Description of the Variety e. Exhibit E. Statement of the Basis of the Applicant's Ownership	•				
f. X Voucher Sample (2,500 viable intracted seeds of foundations)					
f. Voucher Sample (2,600 viable untreated seeds or, for tuber propagated 5. Filing and Examination Fee (\$2,450), made payable to "Tressurer of the DOSS THE ADDITIONAL CONTRACTOR OF THE ADDIT	d varieties verification that tis	sue culture will be deposited and maintained	in a public repository)		
7. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY V	ARIETY NAME ONLY, AS A	CI ASS OF CERTIFIED OCCUPATE			
DOSS THE ADDITIONAL AND	NO df "no," go to	kem 20)	83(e) of the Plant Variety Protection Act)?		
DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED A	S TO NUMBER OF 19.	IF "YES" TO ITEM 18, WHICH CLASSES O	F PRODUCTION BEYOND BREEDER SEED?		
YES NO.	4 7 5 7 35 C 14 C	* 1-4			
HAS THE VARIETY OR A COMMON TO THE PROPERTY OF					
A HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELI	ASED, USED, OFFERED FOR	SALE, OR MARKETED IN THE U.S. OR OT	HER COUNTRIES?		
	ASED, USED, OFFERED FOR	SALE, OR MARKETED IN THE U.S. OR OT	HER COUNTRIES?		
U.S.A. 1999		sale, or marketed in the U.S. or ot	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) declare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in	furnished with application and a public repository and male	SALE, OR MARKETED IN THE U.S. OR OT	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) declare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in the undersigned applicant(s) leters the owner(s) of this sexually reproduced or to Saction 41, and is equitted to protection under the provisions of Saction 42 of the	furnished with application and a public repository and main uber propagated plant variety a Plant Variety Protection Act	SALE, OR MARKETED IN THE U.S. OR OT	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) declare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in the undersigned applicant(s) leters the ewner(s) of this sexually reproduced or to Section 41, and is equited to protection under the provisions of Section 42 of the Applicant(s) is the informed that false representation barelo can be applicant.	furnished with application and a public repository and main uber propagated plant variety a Plant Variety Protection Act	SALE, OR MARKETED IN THE U.S. OR OT	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) deciare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in the undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or to Section 41, and is estitled to protection under the provisions of Section 42 of the Applicant(s) is(are) informed that false representation barelo can be applicant.	furnished with application and a public repository and main uber propagated plant variety a Plant Variety Protection Act ction and result in penalties.	SALE, OR MARKETED IN THE U.S. OR OT	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) declare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in the undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or the Saction 41, and is exitited to protection under the provisions of Saction 42 of the Applicant(s) is(are) informed that false representation herein can jeopardize protection.	furnished with application and a public repository and main uber propagated plant variety Protection Act ction and result in penalties. SIGNATURE	SALE, OR MARKETED IN THE U.S. OR OT will be replenished upon request in accord- alned for the duration of the certificate. and believe(a) that the variety is now, disti	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) declare that a visible sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in The undersigned applicant(s) is large, the owner(s) of this sexually reproduced or the Saction 41, and is editified to protection under the provisions of Saction 42 of the Applicant(s) is life) informed that false representation herein can jeopardize protein NATURE OF APPLICANT (gwner(s)) ME (Please print or type)	furnished with application and a public repository and main uber propagated plant variety Protection Act ction and result in penalties. SIGNATURE	SALE, OR MARKETED IN THE U.S. OR OT will be replenished upon request in accord- ained for the duration of the certificate. and believe(a) that the variety is now, dist	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) declare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in the undersigned applicant(s) is (see) the ewner(s) of this sexually reproduced or to Saction 41, and is settled to protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection and the provisions of the protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) informed that false representation herein can jeopardize protection under the provisions of Saction 42 of the Applicant(s) is (see) in the Applicant(s) in the Applicant(s) is (see) in the Applicant(s) in the Applicant(s) is (see) in the Applicant(s) in the Applicant(s) in the Applicant(s) in the Applicant(s) is (see) in the Applicant(s) in the Appli	furnished with application and a public repository and main uber propagated plant variety Protection Act ction and result in penalties. SIGNATURE	SALE, OR MARKETED IN THE U.S. OR OT will be replenished upon request in accord- alned for the duration of the certificate. and believe(a) that the variety is now, disti	HER COUNTRIES?		
U.S.A. 1999 The applicant(s) declare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in the undersigned applicant(s) is(are) the owner(s) of this asxually reproduced or to Section 41, and is estimated to protection under the previsions of Section 42 of the Applicant(s) is(are) informed that false representation herein can jeopardize protection. The undersigned applicant(s) is(are) the owner(s) of this asxually reproduced or to Section 42 of the Applicant(s) is(are) informed that false representation herein can jeopardize protection. The undersigned applicant(s) is(are) the owner(s) of this asxually reproduced or to the undersigned applicant(s) is(are) informed that false representation herein can jeopardize protection. The undersigned applicant(s) is(are) the owner(s) of this asxually reproduced or the undersigned applicant(s) is(are) informed that false representation herein can jeopardize protection. The undersigned applicant(s) is(are) the owner(s) of this asxually reproduced or the undersigned applicant(s) is a second of the variety will be applicant(s) in the undersigned applicant(s) is a second of the variety will be applicant(s) in the undersigned applicant(s) is a second of the variety will be applicant(s) in the undersigned applicant(s) is a second of the under	furnished with application and a public repository and main uber propagated plant variety Protection Act ction and result in penalties. SIGNATURE	SALE, OR MARKETED IN THE U.S. OR OT will be replenished upon request in accord- almod for the duration of the certificate. and believe(a) that the variety is now, disti OF APPLICANT (Owner(s)) to print or type)	HER COUNTRIES?		

Forage Genetics International PVP Application No. 9900409

Exhibit A (Amended April 20, 2001): Origin and Breeding History of the Variety.

EverGreen is a synthetic variety with 110 parent plants. Parents were selected based on clonal and/or polycross progeny tests for forage yield, forage quality, fall dormancy reaction, disease resistance and potato leafhopper resistance from a glandular haired breeding population previously selected for resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (Race 1), Phytophthora root rot, Aphanomyces root rot (Race 1) and potato leafhopper. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety. The parental populations from which all clones were derived trace to the following cultivars and germplasm releases: TrailBlazer 3.0 (50%), DK131HG (25%) and Arrest (25%).

Breeder seed (Syn1) was produced on parent plants at Nampa, ID in 1997. The breeder will produce sufficient foundation seed (Syn2 or Syn3) for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Alfalfa varieties are heterogeneous populations. Flower color and the frequency of plants with glandular hairs were observed on 100 random plants at the Syn1, Syn2 and Syn3 generations. The population mean and variance for these traits was not significantly different over the three generations. No novel variants for any trait were observed during the three generations of seed increase. Thus, variety has been observed to be uniform and stable through three generations.

Exhibit B: Novelty Statement (Amended April 20, 2001):

This variety can be distinguished from others in the crop by using a number of different varietal traits. High resistance to potato leafhopper makes EverGreen completely unique from all previous alfalfa varieties. The variety most similar to EverGreen is Arrest. EverGreen is most distinct from Arrest in that EverGreen has high resistance to potato leafhopper (79% resistant) whereas, Arrest has a resistant reaction (33%). Also, EverGreen is highly resistant to bacterial wilt (61%) in comparison, Arrest is resistant (47%). Both of these differences exceed the 10% minimum distance necessary to differentiate alfalfa varieties.

Character 1. Potato leafhopper resistance. EverGreen alfalfa has high resistance to the pest (mean PLHR=79%) whereas, Arrest has resistance (mean PLHR=34%), a difference which exceeds the minimum distance of 10%. Potato leafhopper resistance evaluation methods are published in the 1998 revision of Standard Tests to Characterize Alfalfa Cultivars (Green Book).

<u>Test 1</u>. Potato leafhopper resistance -evaluated by Forage Genetics, West Salem, WI-1999 Field Test

Entry	%Resistant Plants	%Resistance Adjusted	Number of Plants Tested
		•	
EverGreen-syn1 (HR)	63	79	75
Arrest –syn2 (R)	26	33	75
PLH 40 (MR)	20	25	75
Ranger (S)	0	0	75
Test mean	49		
L.S.D. 0.05	12.3		
C.V.(%)	15.2		

<u>Test 2</u>. Potato leafhopper resistance -evaluated by Forage Genetics, West Salem, WI-2000 Field Test

	%Resistant	%Resistance	Number of
Entry	Plants	Adjusted	Plants Tested
EverGreen-syn2 (HR)	82	7 9	75
Arrest – syn2 (R)	36	35	75
PLH 40 (MR)	26	25	75
Ranger (S)	0	0	75
Test mean	42.5	41	
L.S.D. 0.05	9.6		
C.V.(%)	11.3		

Exhibit B: Novelty Statement (Amended April 20, 2001):

Character 2. Bacterial Wilt Resistance. EverGreen is highly resistant to bacterial wilt (mean BWR=63%) in comparison, Arrest is resistant (mean BWR=48%), a difference which exceeds the minimum distance of 10%.

<u>Test 1</u>. Bacterial Wilt Resistance-evaluated by Forage Genetics, West Salem, WI – 1999 Lab Test (Standard Tests to Characterize Alfalfa Cultivars, 1995 Revision)

Entry	%Resistant Plants	%Resistance Adjusted	Number of Plants Tested
EverGreen Syn1 (HR) 66	61	150
Arrest-Syn2 (R)	51	47	150
Vernal (R)	43	40	150
Sonora (S)	1	1	150
Test mean	55	51	
L.S.D. 0.05	1 1		
C.V.(%)	15		

<u>Test 2</u>. Bacterial Wilt Resistance-evaluated by Forage Genetics, West Salem, WI – 2001 Lab Test (Standard Tests to Characterize Alfalfa Cultivars, 1995 Revision)

Entry	%Resistant Plants	%Resistance Adjusted	Number of Plants Tested
		• "	
EverGreen- Syn2 (HR	.) 62	65	150
Arrest-Syn2 (R)	47	49	150
Vernal (R)	38	40	150
Sonora (S)	3	3	150
Test mean	38	40	
L.S.D. 0.05	12.7		
C.V.(%)	19.8		

U.S. DEPARTMENT OF AGRICULTURE EXHIBIT C

AGRICULTURAL MARKETING SERVICE SCIENCE & TECHNOLOGY DIVISION PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY

ALFALFA (Medicago sativa, sensu Gunn et al.)

NAME OF APPLICANT(S)	
Forage Genetics, Inc.	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)	PVPO NUMBER 99004U9
N5292 S. Gills Coulee Road West Salem, WI 54669	VARIETY NAME
U.S.A.	EverGreen
	TEMPORARY OR EXPERIMENTAL DESIGNATION F.G. 3A30
PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place the appropriate number that describe Place a zero in the first box (e.g.	es the varietal character of this variety in the boxes below. respectively. Data for quantitative plant characters should be base same trial. Royal Horticultural Society or any recognized calen
. FALL DORMANCY: (DETERMINED FROM SPACED PLANTINGS)	

IMINED FROM SPACED PLANTINGS)

			REGROV	REGROWTH SCORE OR AVERAGE HEIGHT					
TESTING INSTITUTION AND LOCATION	DATE OF LAST CUT	DATE REGROWTH	APPLICATION	CHECK VARIETIES*		1			
ié.		SCORED	VARIETY	Vernal	Ranger	Legend	LSD .05	CV	\bar{x}
Rorage Genetic W. Salem, WI	s 9/97	10/97	3.3	2.0	3.5	4.1	0.24	7.7	2.7
	•								

(* The varieties in parentheses are acceptable check varieties; application varieties must be bracketed by check varieties)

CLASS

- 1 = Very Non-Dormant ('CUF 101', 'Mecca', '5929')
- 2 = Non-Dormant ('Moapa 69', '5715', 'Pierce')
- 3 = Non-Dormant ('Mesilla', 'Sutter', 'Malone')
- 4 = Moderately Dormant ('Lahontan', '581', 'Express')
- 5 = Moderately Dormant ('Excalibur', 'Du Puits', '555')
- 6 = Moderately Dormant ('Saranac', 'WL 316', 'Legend')
- 7 = Dormant ('Ranger', 'Arrow', 'WL 317')
- 8 = Dormant ('Vernal', '526', 'Wrangler')
- 9 = Very Dormant ('Norseman', '5151', 'Spredor 2')

Specify scoring system used: standard test - green book

- FALL GROWTH HABIT (Determined from Fall Dormancy Trials)
 - 1 = Erect ('CUF 101')
 - 3 = Semi-Erect ('Mesilla')
 - 5 = Intermediate ('Saranac AR')
 - 7 = Semi-Decumbent ('Vernal')
 - 9 = Decumbent ('Norseman')

•	RECOVERY AFT	ER FIRST SPRING CUT (In Southwest, first cut after	r March 21):	Exhibit C (Alfalfa) Pag
	6	1=Very fast ('CUF 101') 3= Fast ('Mesil 9=Very slow ('Norseman')	a') 5=Intermediate ('Ranger')	7=Slow ('Vernal')
	•	TEST LOCATION: West Salem, WI		
	Describe the a in which it ma	TATION IN U.S.: area for which this variety is adapted; that is, defi ay reasonably be expected to perform well. ACTERIZATION MUST BE SUPPORTED BY T		
		t £entral and North Central U		
	Dat	a attached		
_				
	FLOWERING DA	TE (When 10% of plants possesses open flowers at time of		
	<u> </u>	Days earlier than		
			Please make all 3 comparisons if po	
	<u> </u>	└ / 4='\	CUF 101' 2='Mesilla' 3='Sara /ernal' 5='Norseman'	nac'
	0 2	Days later than 3	location W. Salem WT	
		Vernal		
	· · · · · · · · · · · · · · · · · · ·	Test Location		
•	CROWN TYPE (D	etermined from spaced plants):		,
	1 Non-c	reeping types 1=Broad ('Vernal') 2=Iı	ntermediate ('Saranac AR') 3=Na	row ('CUF 101')
	Сгеер	ing types 4=Creeping rooted ('Rangela	uder') 5=Rhizomatous ('Rhizoma)
)	FLOWER COLOR	(Determine frequency of plants for each color class as defit allowing all plants in plot to flower):	ed by USDA Agricultural Handbook No. 424 (Ba	rnes 1972),
	0 6 1	% Purple and Violet (Subclasses 1.1 to 1.4)	0 1 0 % Yellow (Subcla	sses 4.1 to 4.4)
	0 2 3	% Variegated (Subclasses 2.1 to 2.9)	0 0 5 % White (Class 5	
	0 0 1	% Cream (Class 3)		
	0 0 1			

								
	•					9900209		
8. PO	D SHAPE (Determine	frequency of plants w	ith the following as 2 -1.	apes produced on well cross-		Exhibit C (Alfalfa) Page		
		•				990040		
	099 %	rightly coiled (o	ne or more coils, ce	nter more or less closed	1).	- 0 4 0		
•	0 0 1 % Loosely coiled (one or more coils, center conspicuously open).							
	00.0 %	Sickle (less than	one coil).					
	To	est locationNa	πρa, ID			•		
Resistaniong terriunadjust varieties Compari	ce levels should be characen resistance averages as a seed values. Trial data from and germplasm lines beloison is required with cheed SEASE RESISTANCE	terized using % resists pproved by the NAAIO m other test years or lo ow can be obtained froi k varieties listed below CE: 1) (Colletotrichum	nt plants as follows: S Data must be adjusted cations should be present the USDA Soybean & data must be adjusted of the cations and the cations are detailed to the cat	ot plants tested, least signific, and whether test is a field of tem and any test procedure <6%, LR-6-14%, MR-15-3 to the long term mean of the ted whenever available on a Alfalfa Research Laborator, according to the expected va	which chilers from those ap 80%, R=31-50%, HR=50% e resistant check variety. Si separate document as Exhil y, Bldg 002, Rm. 10, BARC lue of the resistant check. S	proved by the NAAIC. 6. Checks should be based upply both adjusted and bit D. Seeds of the check		
	Test conducted by.	rorage Ger	eties .	at West Salen	n, WI			
	Variety .	Resistance Class Expected Value		Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested		
٠	This Variety 1. 'Arc' or 2. 'Saranac: AR! x 3. 'Saranac'	HR HIR 65% * 12×45% × × × × × × × × × × × × × × × × × × ×	1	. 60 68 0	58 65 0	220		
	L.S.D. (.05)		•	11	, , , , , , , , , , , , , , , , , , ,			
	C.V. (%) x	•	··* %	15 52	50	•		
	Field or Laboratory	// Year Tested 1	ab 1998		1.			
	Scoring system used		test proc.			A		
A NTEFE	ACNOSE OLO	20 11						
	CACNOSE (RACE 2		rifolli)	•				
	Test conducted by_	· · · · · · · · · · · · · · · · · · ·		at				
	Variety	Resistance Class G	Synthetic eneration Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested		
	This Variety I. 'Saranae AR' 2. 'Arc' or 3. 'Saranae'	R 45% S						

A. DISEASE RESISTANCE: (continued)

APHANOMYCES ROOT ROT (Race 1) (Aphanomyces euteiches)

9900409

Test conducted by Forage Genetics

at West Salem, WI

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'WAPH-1' 2. 'Agate'	R R 50% S 1%	syn 1	35 49 1	36 50 1	220
L.S.D. (.05) C.V. (%)			14 119 31	32	

Field or Laboratory/ Year Tested lab 1998

Scoring system used standard test proc.

APHANOMYCES ROOT ROT (Race 2) (Aphanomyces eutelches)

Test conducted by____

at

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'WAPH-1' 2. 'Agate'	R 50% S 1%			i	
L.S.D. (.05) C.V. (%)					

Field or Laboratory/ Year Tested.

Scoring system used_

BACTERIAL WILT (Clavibacter michiganense)

Test conducted by Forage Genetics

at West Salem, WI

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'Vernal' 2. '敦紹希戴多森特女 3. or 'Sonora'	HR R 42% ¢ \$ ¢ p &¢ S 1%	sÿn 1	66 4 <u>3</u> 1	61 4 <u>0</u> 1	150
L.S.D. (.05) C.V. (%) ¤	. · I		11 15 55	51	

Field or Laboratory/ Year Tested 1999 LAB TEST

Scoring system used Greenhouse standard test (1995 publ.)

Test conducted by __

9900409

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'MSA-CW3ANS3' 2. or 'Ramsey' 3. 'Ranger' 4. 'Moapa 69'	HR 60% HR 60% MR 30% S 0-10%				
L.S.D. (.05) C.V. (%)					·

Field or Laboratory/ Year Tested _____

Scoring system used _

DOWNY MILDEW (Peronospora trifoliorum)

Isolate , if known __

Test conducted by _

at

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'KS208' 2. 'Saranac' isolates 15 & 17, isolate 18 3. 'Kanza'	HR 80% MR 15-20% R 50-60% S 0-5%				
L.S.D. (.05) C.V. (%) ×					·

Field or Laboratory/ Year Tested _____

Scoring system used .

FUSARIUM WILT (Fusarium oxysporum f. medicaginis)

Test conducted by Forage Genetics

at <u>West Salem. WI</u>

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'Agate' 2. 'MNGN-1'	HR × 媒果炸排除 R 45% S 4%	syn 1	64 39 4	74 45 4	150
L.S.D. (.05) C.V. (%) ×			12 14 63	73	

Field or Laboratory/ Year Tested Laboratory Test - 1999

Scoring system used _____ standard test for greenhouse - 1995 publ.

A. DISEASE RESISTANCE: (continued)

PHYTOPHTHORA ROOT ROT (Phytophthora megasperma f. medicaginis)

Test conducted by Forage Genetics

at W. Salem, WI

9900409

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. @@@@' WAPH1 2. 'Saranac'	HR <i>和构</i> HR 55% S 3%	syn 1	59 58 . 3	56 55 3	180
L.S.D. (.05) C.V. (%) ¤			15 16 56	53	

Field or Laboratory/ Year Tested 1ab 1998

Scoring system used standard test proc. (published 1995)

VERTICILLIUM WILT (Verticillium albo-atrum)

Test conducted by Forage Genetics

, Nampa, ID

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'Vertus' or 2. @B@@@&@&@@ 3. 'Saranac'	R R 40% @120@92 S 2%	syn 1	36 33 2	44 40 2	160
L.S.Ď. (.05) C.V. (%) ¤			9 18 34	41	

Field or Laboratory/ Year Tested laboratory 1998

Scoring system used Standard proc.

THEFT	(ODT) OV
ппкк	(SPECIEV)

Test conducted by_

at_____

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1.					
2. 3.	s				
L.S.D. (.05) C.V. (%)	. ;				

Field or Laboratory/ Year Tested_

Scoring system used

B. INSECT RESISTANCE:

Scoring system used_

BLUE

409

Test conducted by_		at			
Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Test
This Variety 1. 'CUF 101' 2. 'PA-1' or 3. 'Caliverde'	HR 55% S 10% S 3%				
L.S.D. (.05) C.V. (%)				·	
Field or Laboratory	/ Year Tested				
Scoring system used	•				
PHID (Acyrthosiphon	pisum)		,		
Test conducted by	orage Genet	ics at_	Nampa, ID		· · · · · · · · · · · · · · · · · · ·
Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number o
This Variety 1. '@@@@@@@@@	HR 10000000	syn 1	48	55	210
2. 'PA-1' or 3. 'Baannan	HR 55%		48	55	
4. 'Vernal' or 5. 'Magaza 60000	S 5%		5	5	
L.S.D. (.05) C.V. (%)			13		
X (76)			17 47	53	
Field or Laboratory/	Year Tested	lab 1999			.1
Scoring system used.	•	test proc.			
ED ALFALFA APHII	D (Therloaphis mac	ulata)	1.		
Test conducted by		•			
Variety	· · · · · · · · · · · · · · · · · · ·				
v arrety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number o Plants Test
This Variety 1. 'CUF 101' or 2. 'Baker'	HR 60% R 50%		· · · · · · · · · · · · · · · · · · ·		
3. 'Arc' or 4. 'Caliverde'	S 3% S 3%				
4. Caliverde					I

9900409

B. INSECT RESISTANCE: (continued)

POTATO LEAFHOPPER YELLOWING (Empoasca fabae)

Test conducted by	at	
•		

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'MSA-CW3AN3' 2. 'Ranger'	R 70% S 5%				
L.S.D. (.05) C.V. (%)					

Field or Laboratory/ Year Tested...

Scoring system used.

OTHER (SPECIFY) Potato Leafhopper Resistance (Empoasca fabae)

Test conducted by Forage Genetics

at Madison, Wisconsin

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. PLH 40 2. Ranger 3.	HR MR S	syn 1	63 20 0	79 25, 0	75
L.S.D. (.05) C.V. (%)			12.3 15.2 49		• • •

Field or Laboratory/ Year Tested Field / 1999

Scoring system used Standard Tests (June 96 revision) Green Book

C. NEMATODE RESISTANCE:

NORTHERN ROOT KNOT NEMATODE (Meloldogyne hapla)

Test conducted by______at_____

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'Nevada Syn XX' 2. 'Lahontan'	HR 90% S 3%				
L.S.D. (.05) C.V. (%) ×					

Field or Laboratory/ Year	r Tested		
		*.	

Scoring system used_____

SOUTHERN ROOT KNOT NEMATODE (Meloidogyne incognita)

		9900409
Test conducted by	 8t	

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 'Moapa 69' 2. 'Lahontan'	R 50% S 3%				
L.S.D. (.05) C.V. (%) x					

Field or Laboratory/ Year Tested_

Scoring system used_

STEM NEMATODE (Ditylenchus dipsaci)

Test conducted by Forage Genetics

at Nampa, ID

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. Well-let-let-let-let-let-let-let-let-let-	R 40% S 5%	syn 1	30 32 3 	38 40 4 	400
L.S.D. (.05) C.V. (%) x			8 18 29	36	

Field or Laboratory/ Year Tested laboratory 1999

Scoring system used standard test procl

OTHER (SPECIFY)

Test conducted by

Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tested
This Variety 1. 2. 3.					
L.S.D. (.05) C.V. (%)	. 1				

Field or Laboratory/ Year Tested_

Scoring system used_

Test conducted by	/		at		
Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted % Resistance	Number of Plants Tester
This Variety 1. 2.					Tiants rester
3.	s			,	·
L.S.D. (.05) C.V. (%)					
Field or Laborato	ry/ Year Tested				<u> </u>
CR (SPECIFY)					<u> </u>
The solution of the solution o			at		
Variety	Resistance Class	Synthetic Generation Tested	Unadjusted % Resistance	Adjusted %. Resistance	Number of Plants Tested
This Variety 1. 2. 3.	s				
L.S.D. (.05) C.V. (%)					
Field or Laborator	y/ Year Tested_			·	
COPECTOY	<u>a</u>				-
		•		-	
Variety	Resistance Class	Synthetic Géneration Tested	Unadjusted % Resistance	Adjusted %	Number of
This Variety 1.			Residence	Resistance	Plants Tested
2.	s				
L.S.D. (.05) C.V. (%) x					
Field or Laboratory	/ Year Tested_			·	
•			englighter from All grants from		

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EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to	determine if a plant variety protection	
1 NAME OF APPLICANT(S) Forage Genetics, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME	
	FG 3A30	EverGreen	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	5. TELEPHONE (include area code)	6 517	
N5292 S. Gills Coulee Rd.	(608)78692121	6. FAX (include area code) (608)786-2193	
west Salem, WI 54669 U.S.A.	7. PVPO NUMBER 9900409		
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate	 block. If no, please explain.		
		X YES NO	
		The state of the s	
 Is the applicant (individual or company) a U.S. national or U.S. based compan If no, give name of country 	y?	X YES NO	
10. Is the applicant the original owner? XX YES NO If no, please and	swer the following:		
a. If original rights to variety were owned by individual(s), is (are) YES NO If no, give name of country		nal(s)?	
b. If original rights to variety were owned by a company, is the original YES NO If no, give name of country	ginal owner(s) a U.S. based comp	any?	
11. Additional explanation on ownership (If needed, use reverse for extra space).			
	•		
·			
PLEASE NOTE:			
Plant variety protection can be afforded only to owners (not licensees) who meet of	one of the following criteria:		
 If the rights to the variety are owned by the original breeder, that person must of a country which affords similar protection to nationals of the U.S. for the sa 	me genus and species.		
If the rights to the variety are owned by the company which employed the originationals of a UPOV member country, or owned by nationals of a country which genus and species.	inal breeder(s), the company mus ch affords similar protection to na	t be U.S. based, owned by tionals of the U.S. for the same	
3. If the applicant is an owner who is not the original owner, both the original owner.	ner and the applicant must meet (one of the above criteria.	
for definition.	eeding. See Section 41(a)(2) of t	he Plant Variety Protection Act	
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